

## Attachment S

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Dear Mr. Diaz

The California Standards Tests (CST) were developed with the intent that each test would cover the content standards for grades 2 through 8 in English language arts (ELA) and mathematics, and, for grades 9 through 11, would cover the standards specific to courses in the following subject areas: ELA, mathematics, history/social science, and science. In 2003, new tests are being added in science at grade 5, and history/social science at grade 8. Independent groups of content experts reviewed the test items to ensure content alignment. Content experts in each subject were also recruited to assure that the new CST test items were developed in accordance with the rationale for establishing a sound content validity foundation as specified in the *Standards for Educational and Psychological Testing*. The final CSTs meet professionally accepted criteria for content validity.

Reliability evidence for previous CST forms was established in two ways. First, the Kuder-Richardson Formula 20 (KR-20), an index of internal consistency, was calculated for each test. Next, asymptotic conditional standard errors of measurement (CSEM) were calculated via item response theory to supplement the KR-20 reliabilities. The CSEM provides an indication of measurement precision at various levels along the ability continuum. CST forms developed for 2003 have been constructed to similar statistical specifications as forms developed in the past. It is anticipated that CST KR-20 coefficients will range in the high .80s and low .90s, which is a generally acceptable level of reliability for tests of these lengths, and comparable to the values observed for previous CST forms. The CSEMs will be lowest in the intervals of the reported score scale where the majority of the test-takers are located. It is expected that the KR-20s and CSEM for the CSTs will meet the intended statistical specifications, and that the CSTs will set an example for desirable psychometric properties.

A key goal of the State's assessment program is determining how California students compare with students throughout the nation in terms of basic academic skills. This objective is accomplished through the inclusion of the California Achievement Tests, Sixth Edition (CAT-6) in the assessment battery. The CAT-6 is a well established norm-referenced test battery that has "survived the test of time". The content- and construct-validity of the battery are described in the CAT-6 Technical Report. Reliabilities for the

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Survey forms used in California are described in the Technical Report as typical for tests of this type.

Please feel free to contact me if you have questions about ETS's efforts to ensure the reliability and validity of the testing programs provided under the STAR contract.

George Powell, Ph.D.  
STAR Executive Director  
Educational Testing Service